

AMENDMENTS TO THE CLAIMS

1. (Previously Presented) A method for cleaving a protein or peptide at a specific site, characterized in that the method comprises the steps:

- constructing at a predetermined cleavage site of the protein or peptide an amino acid sequence of 2 to 20 amino acids, wherein the amino acid sequence comprises $X_1 X_1$ or repeats thereof or two or more repeats of $X_1 Y_n$, wherein $n=1$, X_1 is His and Y_n is any amino acid, and said amino acid sequence is cleavable in the presence of free metal ions, said amino acid sequence does not exist naturally in the protein or peptide to be cleaved; and
- allowing said protein or peptide to react with the metal ion in a buffer, said buffer further comprising a reducing or oxidizing agent or agents.

2. (Previously Presented) The method according to claim 2, wherein the length of the amino acid sequence is 2 to 10 amino acids, preferably 4 to 8 amino acids.

3. (Previously Presented) The method according to claim 2 or 3, wherein the amino acid Y_n is selected from the group comprising Cys, Lys and Trp.

4. (Currently Amended) The method according to ~~any one of the preceding claims~~ claim 1, wherein the amino acid Y_n is His or Lys.

5. (Currently Amended) The method according to ~~any one of the preceding claims~~ claim 1, wherein the amino acid sequence comprises a sequence selected from the group

(His)₂, (His)₄ (SEQ ID NO:28), (His)₆ (SEQ ID NO:29), (His)₈ (SEQ ID NO:30) and His-Ser-His-Ala-His-Gly-His-Ala-His-Ser-His-Gly (SEQ ID NO:9).

6. (Currently Amended) The method according to ~~any one of the preceding claims~~ claim 1, wherein the metal ion is a ion of a metal selected from the group of transition metals, preferably from the group comprising Cu, Co, Ni, Fe, Mn, Cd, Pd, Rh, Ru, Pt, Cr and Zn.

7. (Currently Amended) The method according to ~~any one of the preceding claims~~ claim 1, wherein the metal ion is a ion of a metal selected from the group comprising Cu, Co, Mn, Cr, Ni, Fe and Zn, preferably from the group comprising Cu and Co.

8. (Currently Amended) The method according to ~~any one of the preceding claims~~ claim 1, wherein the metal ion is a ion of Cu.

9. (Currently Amended) The method according to ~~any one of the preceding claims~~ claim 1, wherein the protein to be cleaved is a recombinant protein.

10. (Currently Amended) The method according to ~~any one of the preceding claims~~ claim 1, wherein the amino acid sequence is constructed at a predetermined cleavage site by genetic engineering methods.

11. (Currently Amended) The method according to ~~any one of the preceding claims~~ claim 1, wherein the reaction is carried out in the presence of a reagent selected from the group comprising hydrogen peroxide, ascorbate and dithiothreitol or in the presence of a combination of these reagents.